

## APPENDIX F Maui Department of Water Supply Iao Water Management Rule



**Maui County Administrative Rule  
Title 16, Chapter 9  
IAO WATER MANAGEMENT RULE**

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16-9-1 Purpose. The purpose of the rule is to prevent overdraft of Iao aquifer.

[Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

16-9-2 Definitions. The definitions as set forth herein, and in Board of Water Supply Rules and Regulations Rule Sections 1-2, 16-8-2,

and 16-7-3 shall apply in these rules unless another meaning is plainly evident from the context. If there is any conflict between definitions it is intended that the broader or more inclusive definition apply. If a word or phrase is not defined the commonly accepted definition of that word or phrase shall apply.

"Base period water use" or "base period" means the monthly average water use based on water usage for the immediately preceding full twenty-four (24) month billing cycle at the time of the caution low groundwater declaration. Partial billing cycles are not to be included in the determination of the monthly average.

"Sustainable yield" means the maximum rate at which water may be withdrawn from a water source without impairing the utility or quality of the water source as determined by the Commission on Water Resources Management.

[Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

16-9-3 Caution low groundwater condition.

(a) A caution low groundwater condition exists:

- (1) At any time the 12 month moving average pumpage of gallons of water withdrawn from the lao Aquifer exceeds 95% of the sustainable yield of the lao Aquifer; or
- (2) Whenever chloride content reaches the absolute limit in ppm chloride shown in Column A in Schedule 1 in more than one area based on a 3 month moving average.

(b) The board shall at any time during the period in which a caution low groundwater condition exists inform the public that a caution low groundwater condition exists. Thereafter the director shall:

- (1) Conduct an intensive public appeal for water conservation through the mass media;
- (2) Institute voluntary irrigation and other water use schedules to reduce water consumption;
- (3) Send letters to large consumers and other private well

- operators asking them to cut back their usage; and
- (4) Notify the Mayor, Maui County Council, and the state Commission on Water Resources Management.
- (c) The goal for draft reduction is 5% of lao Aquifer sustainable yield as determined by the Commission on Water Resources Management.
- (d) Consumers shall be given a target of a 10% reduction of their base period water use as the goal for reduction of water use in the caution low ground water condition.
- (e) No new applications for water meters or payment of the water system development fee shall be accepted by the Department at any time when the combination of actual pumpage from the lao Aquifer plus the amount of water estimated to be used, based on paid for meter reservations for meters which have not been physically installed, equals or exceeds 98%.
- (f) The following procedure shall be followed to issue meters after the caution low ground water condition is lifted:
- (1) The director shall establish a system to put all such requests on a master list in the order in which they are received;
  - (2) When applications for meters may be accepted the director shall contact the persons on the master list in the order which the request was received and inform them that they may file an application. The application and payment of the fee must be submitted within 90 days of notification;
  - (3) If the person does not apply for a meter and pay the fee within this period the person is removed from the list and must reapply in the normal course of business; and
  - (4) No new applications for meters shall be accepted until all of the persons on the list have first been offered a meter and have either applied for a meter and paid the fee or have not applied within the period specified in

subsection (3), above.

(g) The director shall, at each board meeting while a caution low groundwater condition exists, report to the board:

- (1) The status of the chloride levels of the department's facilities listed in Schedule 1;
- (2) The weekly average of daily pumpage; the effectiveness of the voluntary conservation measures being advocated; increase or decrease in public appeals to conserve water; and
- (3) Such other information which the board may require from time to time to evaluate the status of the low condition and make modification to the voluntary conservation measures being advocated.

(Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

#### 16-9-4 Alert Low Groundwater Condition.

(a) An alert low groundwater condition exists:

- (1) At any time the 12 month moving average pumpage of gallons of water withdrawn from the Iao Aquifer reaches 98% of the sustainable yield of the Iao Aquifer; or
- (2) Whenever chloride content reaches the absolute limit in ppm chloride shown in Column B in Schedule 1 in more than one area based on a 3 month moving average.

(b) The board shall at any time during the period in which an alert low groundwater condition exists declare that an alert low groundwater condition exists. Thereafter the director shall:

- (1) Implement mandatory restrictions pursuant to Section 16-9-6 of these rules;
- (2) Take appropriate action against those person(s) failing to comply with these provisions as permitted within these and the other Board Rules and Regulations;
- (3) Take any action authorized to be taken pursuant to

Section 16-9-3 of these rules; and

- (4) Notify the Mayor, Maui County Council, and the state Commission on Water Resources Management.

(c) Private wells.

- (1) During an alert low groundwater condition period the Board shall ask owners of private wells that adversely affect the Iao Aquifer sustainable yield to comply with maximum monthly water allotments established for each private well or battery of private wells. Such allotments shall be stated as a percentage of the highest average daily draft for each month of the year over the last five years prior to the effective date of the alert low groundwater condition as declared by the board.

Example:

John Doe Well - Average Daily Pumpage Each Month

	1993	1992	1991	1990	1989
Jan	2.3 mgd	1.7 mgd	*2.4 mgd	2.0 mgd	1.9 mgd
Feb	1.8 mgd	1.9 mgd	1.8 mgd	*2.0 mgd	1.8 mgd
Mar	*1.9 mgd	1.8 mgd	1.8 mgd	1.7 mgd	1.8 mgd
Apr	2.2 mgd	2.0 mgd	*2.6 mgd	2.3 mgd	2.3 mgd
etc.	etc.	etc.	etc.	etc.	etc.

\* Highest Average Daily Pumpage for Each Month of the Year Over the Last 5 years for John Doe Well.

Jan - 2.4 mgd

Feb - 2.0 mgd

Mar - 1.9 mgd

Apr - 2.6 mgd

etc - etc

- (2) In no case shall the allotment be less than 90% of the highest average daily draft for each month of the year over the last five years;
- (3) Any Owner of two or more separate wells may regulate the draft of their wells so that aggregate monthly draft will not exceed the combined monthly allotment for all of their wells;
- (d) The goal for draft reduction is 10% of lao Aquifer sustainable yield as determined by the Commission on Water Resources Management.
- (e) Consumers shall be given a target of a 15% reduction of their base period water use as the goal for reduction of water use in the alert low ground water condition.
- (f) The director shall, at each board meeting while an alert low groundwater condition exists, report to the board:
  - (1) The status of the chloride levels of the department's facilities listed in Schedule 1;
  - (2) The weekly average of daily pumpage; the restrictions and allotments in force; plans to increase or decrease public appeals to conserve water; and
  - (3) Such other information which the board may desire or require from time to time to evaluate the status of the low groundwater condition and make modification to the mandatory conservation measures being advocated.

[Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

16-9-5 Critical Low Groundwater Condition.

- (a) A critical low groundwater condition exists:
  - (1) At any time the 12 month moving average pumpage of gallons of water withdrawn from the lao Aquifer reaches 100% of the sustainable yield of the lao Aquifer;
  - (2) Whenever chloride content reaches the absolute limit in ppm chloride shown in column C in Schedule 1 in more

than one area based on a 3 month moving average.

(b) The board shall at any time during the period in which a critical low groundwater condition exists declare that a critical low groundwater condition exists. Thereafter, the director shall;

- (1) Implement mandatory restrictions within the scope of these rules and regulations;
- (2) Take appropriate action against those person(s) failing to comply with these provisions as permitted within these and the other Board Rules and Regulations;
- (3) Take any action authorized to be taken pursuant to Section 16-9-3 and 16-9-4 of these rules; and
- (4) Notify the Mayor, Maui County Council, and the state Commission on Water Resources Management.

(c) Private wells.

- (1) During a critical low groundwater condition period, the board shall ask owners of private wells that adversely affect the Iao Aquifer sustainable yield to comply with maximum monthly water allotments established for each private well or battery of private wells. Such allotments shall be stated as a percentage of the highest average daily draft for each month of the year over the last five years prior to the effective date of the critical low groundwater condition as declared by the board. The board may, from time to time, increase or decrease the initial percentage limit set for each well or battery of wells provided that in no case shall the percentage be less than 70% of the highest average daily draft for each month of the year over the last five years.
- (2) Any Owner of two or more separate wells may regulate the draft on their wells so that the aggregate monthly draft will not exceed the combined monthly allotment for



all of their wells.

- (d) The goal for draft reduction is 15% of lao aquifer sustainable yield as determined by the Commission on Water Resources Management.
- (e) Consumers shall be given a target of a 20% reduction of their base period water use as the goal for reduction of water use during a critical low ground water condition.
- (f) The director shall, at each meeting while a declared critical low groundwater condition as provided herein is in effect, report to the board:
  - (1) The status of the chloride levels of the department's facilities listed in Schedule 1;
  - (2) The weekly average of daily pumpage; the restrictions and allotments in force; plans to increase or reduce restrictions and allotments; and
  - (3) Such other information which the Board may require from time to time to evaluate the status of the low groundwater condition and make modifications to the restrictions and allotments imposed.

[Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

16-9-6 Mandatory restrictions related to alert low groundwater condition.

- (a) Board of water supply consumers. During an alert low ground-water condition period, the director may set lawn and ground cover water irrigation restrictions on any of the department's consumers. Such restrictions shall relate to the time when such irrigation may take place and the quantity of water used and may be different for the various classes of the department's consumers as the director shall determine. In addition, the director shall establish water allotments for consumers which shall not be less than 90% of the base period water use, but not less than 400 gallons/day for

single family and duplex residences.

(b) During an alert low groundwater condition no meter applications shall be accepted and no meters shall be installed.

(c) Department personnel may issue warnings and citations for violations of mandatory restrictions.

[Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

16-9-7 Mandatory restrictions related to critical low groundwater condition.

(a) Board of water supply consumers. The director shall declare that one or more of the following restrictions apply to any or all classes of the department's consumers. Such restrictions may relate to the time when the uses listed in this paragraph may occur and the quantity of water used and may be different for the various classes of the department's consumers as the director may determine.

(b) The restrictions include the following:

(1) Limits on lawn and ground cover water irrigation;

(2) Limits on plant and garden irrigation;

(3) Limits on the washing of cars, boats, trailers, and other vehicles;

(4) Limits on the filling of swimming pools and other types of pools and ponds;

(5) Limits on the washing of sidewalks, walkways, driveways, patios, parking lots, tennis courts, and other hard-surfaced areas; and

(6) Limits on the operations of fountains.

(c) Department personnel may issue warnings and citations for violations of mandatory restrictions set by the director.

[Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

16-9-8 Surcharge penalties for Alert and Critical Groundwater Conditions.

- (a) During alert and critical low groundwater condition periods, a surcharge schedule for excess water use shall be established according to the following procedure. The director shall set water allotments per billing period for each class of the department's consumers. Such allotments shall be stated as a percentage (which may be greater than 100% but not less than 70%) of the base period water use. In addition, the allotment shall not be less than 400 gallons per day for single family and duplex residences.
- (b) The base period water use as defined in section 16-9-2, above, shall be used to determine surcharge penalties. This amount is not a moving average but is intended to be used for the duration of any Alert or Critical Groundwater condition.
- (c) Surcharge penalties shall be charged as follows during Alert and Critical Groundwater conditions:
1. Usage between the allotment as set forth in Section 16-9-8(a), above, and the base period water usage shall be subject to a surcharge of three (3) times the current highest block rate;
  2. Usage above the base period water usage shall be charged at twenty (20) times the current highest block rate; and
  3. Consumers who use more than the base period water usage are also subject to the installation of a flow restriction device and/or the discontinuation of water service, including removal of the meter.
- (d) Surcharges shall be assessed each consumer after receipt of the first water bill following the establishment of allotments by the board. Upon termination of allotments by the board, surcharges shall cease.

[Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

16-9-9 Penalties. Any violation by any person of the restrictions

declared by the board under Sections 16-9-6 and 16-9-7 of this chapter or who consumes water in excess of the amount designated for their class shall be subject to the installation of a flow restriction device by the department and punishable according to these rules and regulations and section 3-26 of the rules and regulations of the department of water supply. An offender shall pay the actual cost for the installation and removal of a flow restriction device by the department, which cost shall be billed at the prevailing wage rate(s) plus costs for equipment and materials. Water service may be discontinued for an offense committed after the installation of a flow restrictor in accordance with section 3-12 of the rules and regulations of the department of water supply. [Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

16-9-10 Procedures for control of water use during Alert or Critical low groundwater conditions.

(a) Declaration of low groundwater level condition. The Director shall inform the public and the department's consumers of the declaration of an alert or critical low groundwater condition by publishing such declaration in a newspaper of general circulation on the island of Maui at least once a day for three consecutive days. The alert or critical low groundwater condition shall begin at midnight on the third day of the publication declaring such condition. The following notices shall be issued during an alert or critical low groundwater condition:

(l) Notice of restrictions. The Director shall inform the public and the department's consumers of the restrictions being imposed because of an alert or critical low groundwater condition by publishing such restrictions in a newspaper of general circulation on the island of Maui at least once a day for three consecutive days. The restrictions shall begin at midnight on the third day of

publication declaring such condition and shall terminate at midnight on the first day of a publication terminating such condition;

(2) Notice of water allotment to consumers. Each consumer shall be notified of their water allotment per billing period by printing such amount on their water bill or by direct mail to the consumer. In cases where a water bill is not sent directly to the person using the water, the consumer shall be responsible for informing the user of the water allotment per billing period applicable to them; and

(3) Notice of maximum monthly water allotment to private well operators. Private well operators shall be notified by mail of their monthly water allotment.

(b) Exceptions. Consideration of written applications for exceptions regarding the allotment system or regulations and restrictions on water use shall be set forth in this chapter. Written applications for exceptions shall be accepted, and may be granted, by the director. The director shall report to the Board at each Board meeting a list of all exemptions requested and exceptions granted by consumer class since the previous meeting. Grounds for granting such exceptions are:

(1) Failure to do so would cause an unnecessary and undue hardship to the applicant, including but not limited to adverse economic impacts such as loss of production or jobs;

(2) Failure to do so would cause an emergency condition affecting the health, sanitation, fire protection, or safety of the applicant or the public;

(3) For single family residences with more than four persons permanently residing in the home, if a written application for exception is granted as provided herein, the applicable allotment shall be increased by 40

gallons per person per day for each person permanently residing in the home in excess of four persons;

(4) For multiple residential units with more than two dwelling units where the allotment is less than 280 gallons per day per dwelling unit, if a written application for an exception is granted as provided herein, the applicable allotment shall be 280 gallons for each unit; and

(5) Denial of an application for exception may be appealed in writing to the board, which shall consider the appeal as a contested case pursuant to Board of Water Supply Rules of Practice and Procedure, Title 16, chapter 2.

(c) The director shall inform the public and the department's consumers of the termination by the Board of an alert or critical low groundwater condition by publishing such termination in a newspaper of general circulation on the island of Maui at least once a day for three consecutive days. The alert or critical low groundwater condition and all restrictions and allotments associated therewith shall terminate at midnight on the first day of a publication terminating such condition.

[Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

16-9-11 Termination of Caution, Alert, or Critical low groundwater conditions. The board may terminate a declared Caution, Alert, or Critical Low Groundwater condition whenever chloride content and moving annual average pumpage over three consecutive months at sources that caused the declared low groundwater level conditions to exist are appropriately reduced below their respective amounts.

[Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

16-9-12 Exemption of private wells within designated groundwater

control areas. New and existing private wells within designated groundwater control areas only shall be exempt from the provision of these rules and regulations. However, owners of private wells shall be asked to comply with any allotments set by the board for private wells. Control and regulation of such wells shall be subject to state statutes, rules, regulations, directives, and standards as currently exist and as may, from time to time hereafter, be amended.

[Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

16-9-13 Relationship between designation of the Iao Aquifer for management and the Iao Water Management Rule. Upon designation of the Iao Aquifer by the appropriate state agency the Board shall meet and consider the reasons for designation and independently determine whether the criteria for declaring either a caution, alert, or critical low groundwater condition exists and, if so, to declare the appropriate low groundwater condition as existing. Nothing in this rule shall require the Board to declare that any such low groundwater condition exists, even though the Iao Aquifer may be so designated by a state agency.

[Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

16-9-14 Effective date. This rule shall become effective ten (10) days after it is filed with the county clerk of the county of Maui.

[Eff. 03/15/99] (Auth: HRS 91-4) (Imp: HRS 54-33)

Adopted on the 14th day of January, 1999, by the Board of Water Supply of the County of Maui.

**LOW GROUNDWATER  
SCHEDULE 1**

COLUMN A

COLUMN B

COLUMN C

("Caution Low Ground-Water Condition)		("Alert" Low Ground-Water Condition)		("Critical" Low Ground-Water Condition)	
Central District		Central District		Central District	
Area	Absolute Chloride Level ppm	Area	Absolute Chloride Level ppm	Area	Absolute Chloride Level ppm
Wailuku Shaft	80	Wailuku Shaft	100	Wailuku Shaft	120
Mokuhaul	160	Mokuhaul	180	Mokuhaul	200
Waiehu Heights	160	Waiehu Heights	180	Waiehu Heights	200
Waiehu	80	Waiehu	100	Waiehu	120
Kepaniwai	40	Kepaniwai	60	Kepaniwai	80

*"By Water All Things Find Life"*

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